

## We claim:

1. Instrument for the unipolar ablation of heart tissue with an electrically conductive tube electrically insulated on its outer surface, with an electrical connector on the proximal end of the tube which is electrically conductively connected to said tube, with a rinse connection on the proximal end of the tube which is in communication with a lumen of the tube and with an electrode mounted into the distal end of the tube which is connected electrically conductively to the tube and which features at least one discharge opening which is in communication with the lumen of the tube

characterized thereby that

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the tube is a rigid shaft tube (20) and that the electrode (14) is connected detachably with the distal end of the shaft tube (20).

- 2. Instrument according to claim 1 thereby characterized that the electrode (14) is connected to the shaft tube (20) by means of an axial plug-in detent.
- 3. Instrument according to claim 1 or 2 thereby characterized that the electrode (14) is coaxially inserted into the distal end of the shaft tube (20) axially contacting a stop establishing the electrical contact with the shaft tube (20) and that an electrically insulating electrode ferrule (38) which surrounds the electrode (14) is snapped onto the shaft tube (20) and holds the electrode (14) in the stop position on the shaft tube (20).

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- 4. Instrument according to claim 3 thereby characterized that the electrode ferrule (38) coaxially overlaps the insulating cladding (22) of the shaft tube (20) in part and snaps on by means of a radial groove (26) and a corresponding detent (40).
- 5. Instrument according to claim 3 or 5
  thereby characterized that
  the electrode (14) inserted coaxially into the distal end of
  the shaft tube (20) contacts the distal end of the shaft tube
  (20) axially with its external collar (30).
- 6. Instrument according to claim 5
  thereby characterized that
  the electrode ferrule (38) features an internal collar (42)
  which distally contacts the external collar (30) of the
  electrode (14) and which secures the electrode (14) axially
  contacting to the shaft tube (20).
- 7. Instrument according to one of the previous claims thereby characterized that the electrode (14) is constituted as a cylindrical part closing the lumen of the shaft tube (20) which features a proximal blind hole (32) which is open to the lumen of the shaft tube (20) in which at least one radial discharge opening (34) extends radially from the circumflex of the electrode (14) into the blind hole (32).
- 8. Instrument according to claim 7 thereby characterized that

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between the outer surface of the electrode (14) and the distal end of the electrode ferrule (38) an annular gap (44) remains open in the distal direction and that at least one discharge opening (34) meets with this annular gap (44).

- 9. Instrument according to one of the previous claims thereby characterized that the electrode ferrule features a radially enlarged flange (46) on its distal end which limits the insertion depth of the tip of the electrode (14) which protrudes from the flange (46) in the distal direction.
- 10. Instrument according to one of the previous claims thereby characterized that a handle (12) made from plastic is located at the proximal end of the shaft tube 20.
- 11. Instrument according to claim 10
  thereby characterized that
  the handle (12) in the form of a pen grip is directly molded
  onto the shaft tube (20).
- 12. Instrument according to claims 10 or 11 thereby characterized that the handle (12) and the cladding (22) of the shaft tube (20) consist of the same material.
- 13. Instrument according to one of the previous claims thereby characterized that

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the distal end of the shaft tube (20) with the electrode (14) is angled between approximately  $30^{\circ}$  and  $45^{\circ}$  with respect to the centerline of the shaft tube (20).